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Release Notes RN

IMC 120™

Series B Revision 1.03 — May 1993

(1771-HS)

Using this Document

Use this document to learn about:

- Series B revision 1.03 firmware changes for the IMC 120 module (cat no. 1771-HS)
- Revision 3.02 changes for the Offline Development Software (ODS) (cat no. 8100-HSKAR)
- Enhancements to the IMC 120 module firmware

Revision 1.03 Firmware/Software

IMC 120 Series B revision 1.03 system firmware is compatible with revision 3.01 and 3.02 of ODS (8100-HSKAR). The new part number for the IMC 120 firmware is 93874904.

Finding Out Your ODS Revision

You can determine what revision of ODS is in your personal computer by selecting the ABOUT(?) function:

1. Start ODS.
2. Select the ABOUT(?) option under the F1 menu.



ATTENTION: Your ODS must be revision 3.01 or later to be compatible with Series B revision 1.03 firmware for the IMC 120.

To make sure that you receive the latest version of ODS, send in your registration card that comes with your 8100-HSKAR package.

Firmware/Software Changes

See the tables below for the firmware/software changes made in this release.

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Table 1
IMC 120 Firmware Changes

Changes made to IMC 120 Firmware	Description of Corrected Anomaly
Linear Scales	Broken wire detection is disabled on power up for systems configured for linear scale feedback.
ORG	MML ORG statement is not being handled correctly when MML programs were aborted in E-stop. Switching to manual mode and commanding a jog can cause the axis to move in the wrong direction.
Reversal Error	Reversal error does not compensate if the axis is jogged in continuous mode when the overtravels are disabled.
Move Complete Bit	During automatic cycle, the move complete bit does not get set to zero during axis motion. The move complete bit functions properly with manual jogs.
ABORT	ABORT functions called from a global condition handler will not execute when the IMC 120 is in E-stop.
Decel Profile	There is a slight glitch on the deceleration ramp if an axis is running in the minimal following error mode.
SET HOME	Using a value for SET_HOME other than zero, will cause a "CAN'T RESET AMP NOT LOADED" error when power is cycled.
PLC® Processor E-stop	An E-stop request from the PLC processor does not generate an E-stop message on the handheld pendant.
Handheld Pendant	Plugging and unplugging the handheld pendant in rapid succession will occasionally cause the RUN light to go out.
FOUT	If a FOUT was turned on by the handheld pendant and then the PLC controller was switched from RUN to PROGRAM to RUN mode, the FOUT would be turned off, but the handheld pendant would still indicate that the FOUT was on.
Feedback Fault	If a feedback fault such as "QUADRATURE ERROR" occurs during a move, the program will continue without requiring a re-home of the axis. This can cause an axis to misposition by the number of counts lost during the feedback fault.
$SPEED_OVR	Setting $SPEED_OVR to zero does not inhibit motion when performing very short MOVE BY commands.
CANCEL	The MML program hangs if the following sequence of events happens during a move with a termtype of NODECEL: 1. A global condition handler trips which issues a CANCEL command followed by a routine call. 2. The called routine issues a new move statement with a termtype of COARSE.
Axis Position	For a rotary axis with rollover, it is possible to exceed the AMP defined rollover point when the MML program terminates if the program uses multiple PRESETs.
Divide by Zero Error	There is a possibility of causing a "DIVIDE BY ZERO" error if condition handlers, probing functions, and motion statements are active at the same time in the MML program.

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Table 1
IMC 120 Firmware Changes (cont.)

Changes made to IMC 120 Firmware	Description of Corrected Anomaly
RATIO	If $DELPHASE is modified just after issuing an ENDRATIO AND STOP command, the slave axis will immediately act upon the delphase change and cause a jump.
	Resetting DELPHASE to zero, after terminating ratioing, will cause the slave axis to jump if ratioing is re-initiated.
HANDHELD PENDANT	Immediately after the IMC 120 module is powered up, pressing the following keys in sequence will lock up the handheld pendant: STATUS, ENTER, and F1.

Table 2
ODS Software Changes

Changes made to IMC-120 ODS software	Description of Corrected Anomaly
MML File Size Limit	An "OUT OF MEMORY" error could occur if an MML program is larger than approximately 40Kb.
Forward References	A "FATAL ERROR" can occur during the second pass of the MML compiler if the MML program has more than 200 forward references.
Linear Scales	AMP files can not be uploaded from an IMC module configured for linear scale feedback. A parameter (3110) out of range error will occur during the AMP upload.
Copy Projects	When a project created with ODS revision 3.00 or earlier is attempted to be copied using ODS 3.01, an error will occur and the copy will be aborted.
HHP not Updating	The handheld pendant does not get updated during the execution of the WAIT FOR statement.
Lost Clusters in Chains	Compiling MML programs leaves open files on the hard drive. The DOS CHKDSK command indicates "lost clusters found".
Opening MML Files	An MML file must be closed (quit) before a second MML file is opened. Failure to do this results in many errors when the second MML file opens.
User Defined Variable "X"	Declaring a variable as "x:integer" sometimes causes errors during an MML save.



ATTENTION: We recommend that you remove your previous version of ODS before installing the new version.

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Table 3
Firmware/Software Enhancements

Enhancements made to IMC 120 Firmware	Description of Enhancement
Feedback Failure	Feedback failure did not require the user to re-home the axis even though the control might have lost track of the axis position. Now, the axis must be re-homed whenever feedback is lost.
$UNITS	The system variable $UNITS has been expanded to allow the user to extract either the commanded or actual axis position via the handheld pendant or block transfer reads. The new definition of $UNITS is: $UNITS = 0 commanded position in inch/degrees = 1 commanded position in mm/revs = 2 actual position in inch/degrees = 3 actual position in mm/revs

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